

**Arctic Mining: Environmental issues,
mitigation and pollution control for
marine and coastal mining-
Workshop March 21, 22, 23, 2023**



Title: Marine Tailing Disposal: The Norwegian Experience
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What is the Purpose of your Talk? The aim of the talk is to provide insights and lessons learnt from Norwegian sea deposits regarding environmental impacts, and to give an overview of major knowledge gaps, as well as presenting guidelines for the development of best available techniques for STDs.
Abstract: Submarine tailing disposal (STD) in fjords from land-based mines has been a practice in Norway, although controversial. Until quite recently, the impacts on marine ecosystems had received relatively little scientific attention. To increase such knowledge, a multidisciplinary research programme (NYKOS; New Knowledge on Sea Deposits) was initiated. The major results from this programme, as well as other research studies and environmental monitoring programmes will be presented; spanning from geological seabed mapping to toxicity testing and experiments on the benthic community level, and from fjords from the south to the north of Norway. Experience from the Arctic fjord Repparfjorden will receive extra emphasis, representing both an old deposition area (> 40 y) and a pre-mining site. By combining a field and an experimental approach, both short- and long-term benthic recovery was studied in this fjord. Major knowledge gaps arising from the existing knowledge will be presented, as well as suggestions for guidelines for the development of best available techniques for STDs, based on the Norwegian experience.